

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.
NE063

SERIAL NO.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use several sheets if necessary)

(37 CFR 1.98(b))

APPLICANT
Nobuyuki ISHIWATA et al.

FILING DATE
December 3, 1998

GROUP



U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NO.	PUBL. DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANSLATION YES NO
WOK	AL	5-63254	3/93	Japan	—	—	NO
WOK	AM	8-70148	3/96	Japan	—	—	NO
WOK	AN	8-70149	3/96	Japan	—	—	NO
WOK	AO	9-209292	4/97	Japan	—	—	NO
WOK	AP	6-244477	9/94	Japan	—	—	NO

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

WOK	AR	R.P. Hunt, "A Magnetoresistive Readout Transducer," 1971, pp. 150-154, <u>IEEE Trans. On Magn.</u>
WOK	AS	C. Tsang et al., "Design, Fabrication & Testing of Spin-Valve Read Heads for High Density Recording," 1994, pp. 3801-3806, <u>IEEE Trans. On Magn.</u>
WOK	AT	J. Moodera et al., "Ferromagnetic-insulator-ferromagnetic tunneling: Spin-dependent tunneling and large magnetoresistance in trilayer junctions (invited)," April 15, 1996, pp. 4724-4729, <u>J. Appl. Phys.</u> , Vol. 79..

EXAMINER

W. K.

DATE CONSIDERED

4-17-00

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NO.	PUBL. DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANSLATION YES NO
WIK	AL	8-316548	11/96	Japan			NO
	AM						
	AN						
	AO						
	AP						

OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

WIK	AR	NIKKEI ELECTRONICS article, No. 686, April 7, 1997.
WIK	AS	N. Tezuka et al., "Relationship between the Barrier and Magnetoresistance Effect in Ferromagnetic Tunneling Junctions," 1997, pp. 493-496, 1997 Journal of Japan Applied Magnetism Society (Vol. 21).
	AT	

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ATTY. DOCKET NO.
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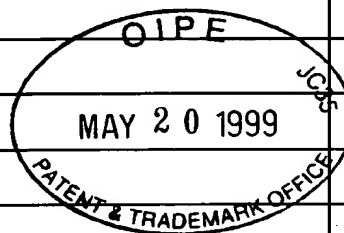
APPLICANT
Nobuyuki ISHIWATA et al.

FILING DATE
December 3, 1998

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2754

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
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FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NO.	PUBL. DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRANSLATION YES NO
WJK	AL	4-103014	4/92	Japan	/	—	NO
WJK	AM	5-151533	6/93	Japan	—	—	NO
WJK	AN	9-282616	10/97	Japan	—	—	NO
WJK	AO	60-113313	6/85	Japan	—	—	NO
WJK	AP	61-126618	6/86	Japan	—	—	NO

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